

- PART 1 - GENERAL .1 Contractor to engage an electrician holding a provincial Certificate or Qualification to meet electrical requirements of project.
- 1.1 RELATED REQUIREMENTS .1 Section 07 46 13 - Preformed Metal Siding
.2 Section 07 27 00.02 - Air Barriers – Performance
.3 Section 07 92 00 - Joint Sealants
- 1.2 REFERENCES .1 American National Standards Institute (ANSI)
.1 ANSI C82.1-04, Lamp Ballasts-Line Frequency Fluorescent Lamp Ballast.
.2 ANSI C82.4-02(R2007), Ballasts for High-Intensity-Discharge and Low-Pressure Sodium Lamps Multi Supply Type.
.2 American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE)
.1 ANSI/IEEE C62.41-1991, Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits.
.3 ASTM International Inc.
.1 ASTM F 1137-00(2006), Standard Specification for Phosphate/Oil and Phosphate/Organic Corrosion Protective Coatings for Fasteners.
.4 Canadian Standards Association (CSA International)
.5 ICES-005-07, Radio Frequency Lighting Devices.
.6 Underwriters' Laboratories of Canada (ULC)
- 1.3 ACTION AND INFORMATIONAL SUBMITTALS .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
.2 Product Data:
.1 Provide manufacturer's printed product literature, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
.2 Provide complete photometric data prepared by independent testing laboratory for luminaires where specified, for approval review by Departmental Representative.
.3 Photometric data to include: VCP Table where applicable spacing criterion.
.3 Samples:
.1 Provide samples as indicated. Install wall sample fixtures, design wall in mock-up ceiling. Do not include cost of mock-up in

project price. Locate mock-up on site.

- .4 Quality assurance submittals: provide following in accordance with Section 01 11 55.
 - .1 Manufacturer's instructions: provide manufacturer's written installation instructions and special handling criteria, installation sequence, and cleaning procedures.

1.4 QUALITY ASSURANCE

- .1 Work to be done under current Standard and Codes by an electrician holding a provincial Certificate or Qualification.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Deliver materials to site in original factory packaging, labeled with manufacturer's name, address.
- .3 Packaging Waste Management: remove for reuse and return by manufacturer of pallets crates padding and packaging materials in accordance with Section 01 74 19 - Construction/Demolition Waste Management and Disposal.
- .4 Divert unused metal materials from landfill to metal recycling facility.
- .5 Disposal and recycling of fluorescent lamps as per local regulations.
- .6 Disposal of old PCB filled ballasts.

PART 2 - PRODUCTS

2.1 LAMPS

- .1 LED providing 1200 lumens for recessed downlights, 2400 lumens for wall packs
- .2 L70 expectancy of 70,000 hours
- .3 Colour Temperature: 5000K +/-200K

2.3 FINISHES

- .1 Light fixture finish and construction to meet ULC listings and CSA certifications related to exterior installation.
- 2 Housing colour to be black.

2.4 LUMINAIRES

- .1 LED recessed potlights for saline environment. As indicated on Electrical drawing E1
 - .1 UL 1598 Wet location list.
 - .2 Stainless steel housing. 150 mm diameter.
 - .3 Polycarbonate lens cover.

- .2 LED downlighting wallpacks for saline environment. As indicated on Electrical drawing E1
 - .1 UL 1598 Wet location list.
 - .2 120 degree beam angle
 - .3 Polycarbonate lens cover.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Locate and install luminaires as indicated on drawings.
- .2 Provide adequate support to suit soffit and wall system.

3.2 WIRING

- .1 Connect luminaires to lighting circuits:
 - .1 Install EMT conduit for all replaced luminaires
- .2 Install wiring in EMT conduit for additional luminaire. Connect to circuit as indicated by Departmental Representative, or Airport Maintenance Specialist.
 - .1 Minimum wiring to be #12 AWG
 - .2 All new wiring is to have 600V RW90XLPE insulation.

3.4 LUMINAIRE ALIGNMENT

- .1 Align luminaires mounted in continuous rows to form straight uninterrupted line.
- .2 Align luminaires mounted individually parallel or perpendicular to building grid lines.

3.5 CLEANING

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.
- .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Construction/Demolition Waste Management and Disposal.

END OF SECTION